

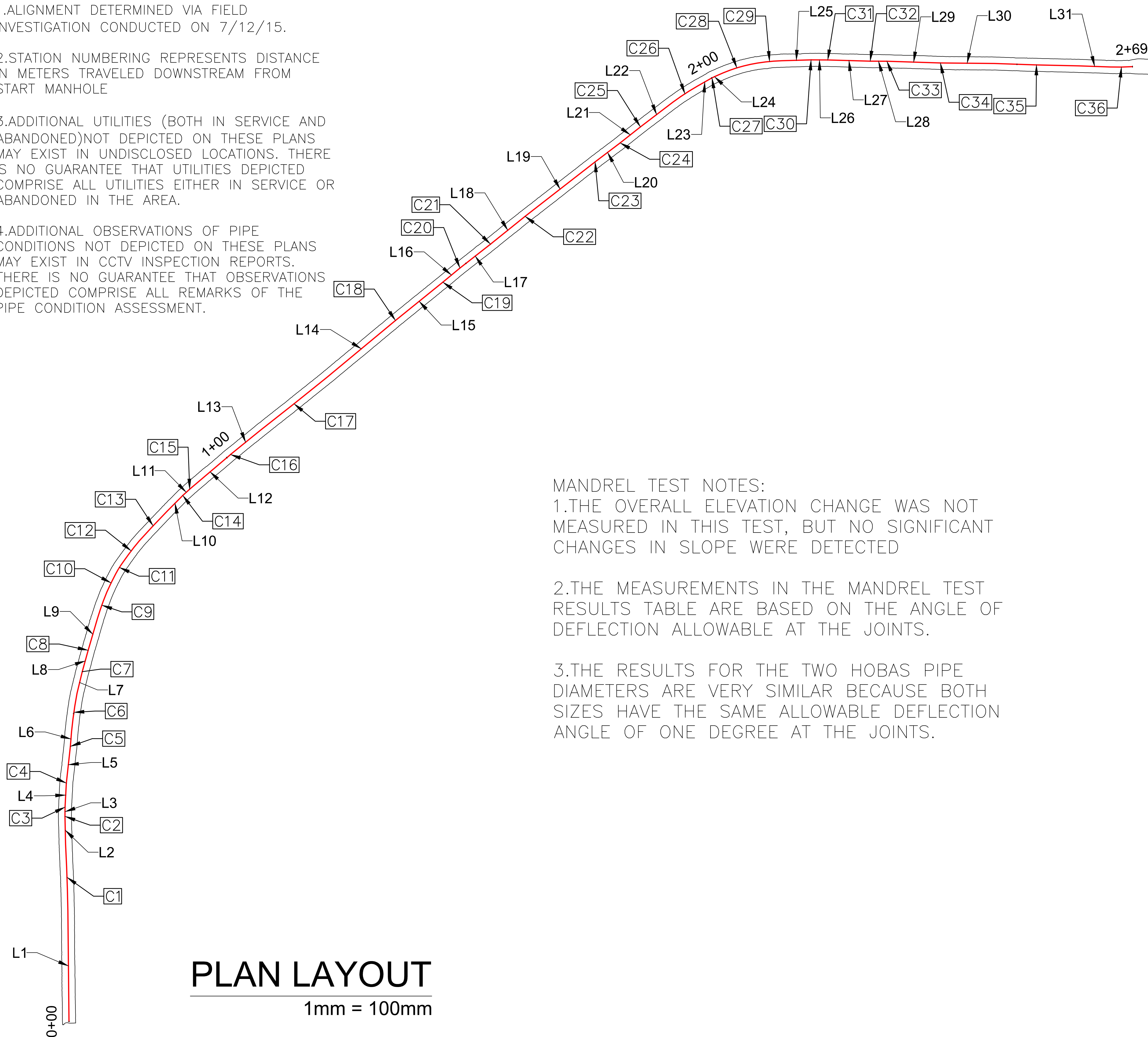
GENERAL NOTES:

1.ALIGNMENT DETERMINED VIA FIELD INVESTIGATION CONDUCTED ON 7/12/15.

2.STATION NUMBERING REPRESENTS DISTANCE IN METERS TRAVELED DOWNSTREAM FROM START MANHOLE

3.ADDITIONAL UTILITIES (BOTH IN SERVICE AND ABANDONED)NOT DEPICTED ON THESE PLANS MAY EXIST IN UNDISCLOSED LOCATIONS. THERE IS NO GUARANTEE THAT UTILITIES DEPICTED COMPRISE ALL UTILITIES EITHER IN SERVICE OR ABANDONED IN THE AREA.

4.ADDITIONAL OBSERVATIONS OF PIPE CONDITIONS NOT DEPICTED ON THESE PLANS MAY EXIST IN CCTV INSPECTION REPORTS. THERE IS NO GUARANTEE THAT OBSERVATIONS DEPICTED COMPRISE ALL REMARKS OF THE PIPE CONDITION ASSESSMENT.



PLAN LAYOUT

1mm = 100mm

MANDREL TEST NOTES:

1.THE OVERALL ELEVATION CHANGE WAS NOT MEASURED IN THIS TEST, BUT NO SIGNIFICANT CHANGES IN SLOPE WERE DETECTED

2.THE MEASUREMENTS IN THE MANDREL TEST RESULTS TABLE ARE BASED ON THE ANGLE OF DEFLECTION ALLOWABLE AT THE JOINTS.

3.THE RESULTS FOR THE TWO HOBAS PIPE DIAMETERS ARE VERY SIMILAR BECAUSE BOTH SIZES HAVE THE SAME ALLOWABLE DEFLECTION ANGLE OF ONE DEGREE AT THE JOINTS.

Hobas Mandrel Nominal 72" O.D. = 1948mm Joint Angle = 1 deg				
Number	Angle (deg)	Rad (m)	0.43m Passing?	Max Passing (m)
C1	2	311.9	YES	3+
C2	2.1	0	YES	2.4
C3	2.2	0	YES	1.25
C4	3.4	0	YES	1.25
C5	1.9	0	YES	1.25
C6	5.3	68.2	YES	1.15
C7	1.9	0	YES	1.15+
C8	0.9	0	YES	1.15+
C9	5.5	46.9	YES	0.81
C10	4.8	39.8	YES	0.69
C11	9.4	14.7	YES*	0.25
C12	5.7	42.5	YES	0.74
C13	1.9	204.4	YES	3+
C14	2.5	0	YES	0.43+
C15	2.3	0	YES	0.43+
C16	1.3	0	YES	0.43+
C17	1.4	563.7	YES	3+
C18	0.7	0	YES	0.43+
C19	0.7	0	YES	0.43+
C20	1.7	0	YES	0.43+
C21	0.8	0	YES	0.43+
C22	0.8	0	YES	0.43+
C23	0.8	0	YES	0.43+
C24	1.3	0	YES	0.43+
C25	1.2	0	YES	0.43+
C26	6.3	43.4	YES	0.75
C27	4.6	0	YES	0.43+
C28	15.9	25	YES	0.43
C29	6.6	33.8	YES	0.58
C30	2	0	YES	0.8+
C31	1.3	0	YES	0.8+
C32	1.5	0	YES	0.8+
C33	1.7	0	YES	0.8+
C34	1.2	0	YES	0.8+
C35	1.2	686.1	YES	3+
C36	4.5	46.3	YES	0.8

*While lengths greater than 0.25m will not pass a 14.7m radius, C11 is short enough that 0.43m segments will pass when C9 through C13 are considered collectively.